

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

**(19) World Intellectual Property Organization
International Bureau**



A standard linear barcode is located at the top of the page, spanning most of the width. It is used for document tracking and identification.

(43) International Publication Date
8 February 2001 (08.02.2001)

PCT

(10) International Publication Number
WO 01/09200 A1

(51) International Patent Classification⁷: C08F 10/00,
4/642, C08L 23/16

(21) International Application Number: PCT/GB00/02970

(22) International Filing Date: 31 July 2000 (31.07.2000)

(25) Filing language:

(26) **Partial** *vs.* **Full**

(30) Priority Data: 9917851.9 20-Jul-1988 (75.0)

(71) Applicant (for all designated States except US): BOREALIS TECHNOLOGY OY [FI/FI]; P.O. Box 330, FIN-06101 Porvoo (FI)

(72) Inventors; and
(75) Inventors/Applicants (for US only): FOLLESTAD,
Arlid [NO/NO]; Damstien 10, N-3960 Stathelle (NO).
OMMUNDSEN, Espen [NO/NO]; Postveien 11, N-3970
Langsund (NO).

(74) Agents: **MARSDEN, John, Christopher et al.**; Frank B. Dehn & Co., 179 Queen Victoria Street, London EC4V 4EL (GB).

(81) **Designated States (national):** AE, AG, AL, AM, AT, AZ (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KW (utility model), KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, SI, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- *With international search report.*
- *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPROVEMENTS IN OR RELATING TO POLYMERS

(57) **Abstract:** Olefin homopolymers and copolymers, including novel products with essentially complete particle to particle homogeneity and having polymer chain defects introduced in a controlled manner across their molecular weight distribution, are prepared by a process comprising polymerisation under essentially constant conditions in a single reactor in the presence of a catalyst system comprising a support material comprising at least two metallocene olefin polymerisation catalysts having different propensities for incorporation of polymer chain defects.